

WHAT IS CLAIMED IS:

1. A cathode ray tube comprising: a panel having a fluorescent formed on an inner surface thereof; a funnel connected to the panel; an electron gun housed in the funnel, emitting electron beams; a deflection yoke for deflecting the electron beams in horizontal and vertical directions; and a shadow mask for selecting colors of the electron beams, wherein the electron gun is comprised of a cathode for emitting electron beams, a first electrode for controlling an emission amount of the electron beams, a second electrode for accelerating the electron beams, at least two electrodes for forming a pre-focus lens, focusing a designated amount of the electron beams, and at least two main lens forming electrodes for forming a main lens, focusing the electron beams onto a screen, and a horizontal inside diameter (D_r) of an opening portion of one of the main lens forming electrodes and a horizontal distance (D_i) between outside end of one outer electron beam passing hole to outside end of the other outer electron beam passing hole of a correction electrode mounted with three electron beam passing holes on an inside thereof satisfy a relation of $0.97 \leq D_i/D_r \leq 1.03$.

2. The cathode ray tube according to claim 1, wherein a horizontal size (S_x) of the outer electron beam passing hole and a horizontal size (C_x) of a central electron beam passing hole of the correction electrode formed on at least one of the main lens forming electrodes satisfy a relation of $0.6 \leq C_x/S_x \leq 0.75$.

3. The cathode ray tube according to claim 1, wherein D_i/D_r of one of the main lens forming electrodes, being opposite to an electrode to which an anode voltage is applied, is greater than D_i/D_r of the electrode to which the anode voltage is applied.

4. The cathode ray tube according to claim 2, wherein C_x/S_x of one of the main lens forming electrodes, being opposite to an electrode to which an anode voltage is applied, is less than C_x/S_x of the electrode to which the anode voltage is applied.

5. The cathode ray tube according to claim 4, wherein S_x of the correction electrode formed on at least one of the main lens forming electrodes is 6.8mm and less.

6. The cathode ray tube according to claim 1, wherein a horizontal size of an electron beam passing hole on the first electrode is equal to or greater than a vertical size of the same.

7. The cathode ray tube according to claim 6, wherein horizontally elongated electron beam passing holes or horizontally elongated slots are formed on the second electrode.

8. The cathode ray tube according to claim 1, wherein a depth (d) from an opening portion to a correction electrode of at least one of the main lens forming electrodes is in a range of 3.2 – 4.2mm.

9. The cathode ray tube according to claim 8, wherein a depth (d) from an opening portion to a correction electrode of an electrode to which an anode voltage is applied is greater than a depth (d) from an opening portion to a correction electrode of an opposite electrode.

10. The cathode ray tube according to claim 1, wherein an outer surface of the panel is substantially flat, and an inner surface of the panel has a designated curvature.

11. The cathode ray tube according to claim 1, wherein a shape of a yoke mounting portion of the funnel on which the deflection yoke is mounted gradually changes from a circular shape to a non-circular shape from a neck side of the funnel to the panel side direction.

12. The cathode ray tube according to claim 1, wherein horizontally elongated electron beam passing holes or horizontally elongated slots are formed on the second electrode.